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What are the impacts of local food systems?

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Abstract

Sourcing products locally is not just a trend, it is also an important step towards sustainable business practices. Sustainable business depends on balancing sales with the ability to maintain growth. Sustainability is a complex concept. In the charter for the UCLA Sustainability Committee, sustainability is defined as: "the physical development and institutional operating practices that meet the needs of present users without compromising the ability of future generations to meet their own needs, particularly with regard to use and waste of natural resources. Sustainable practices support ecological, human, and economic health and vitality. Sustainability presumes that resources are finite and should be used conservatively and wisely with a view to long-term priorities and consequences of the ways in which resources are used." When talking about sustainability, it is important to look at the three P's: Planet, People, Profit. Keeping these in mind when making decisions about your business will help you ensure that you can minimize your environmental impact, make your customers and community happy, and have economic success. This article will focus on the benefits and challenges encountered in each area specifically economic, environmental, health and well-being and the social impact.

Keywords: sustainable, sourcing, local, environment, economic, social responsibility, health

Introduction

This article proposes that local food sourcing, no matter the region, has the potential to improve that region's economy, environment, health and community. In order to explore this theory, we must first define "local food". Organizations and individuals' definitions vary quite a bit. Federal legislation like the 2008 Farm Bill, which guides the US Department of Agriculture, defined local food as food that is grown and transported less than 400 miles, or within the same state (Fisher & Becker, 2008). State organizations such the NC Department of Agriculture & Consumer Services (NCDA&CS) and North Carolina Cooperative Extension (NCCE) use state boundaries to define local food. Consumer definitions on the other hand include how food was grown (pesticide-free), and who grew it (small-scale, family farmers). Still others say it depends on how far the food has traveled and how the food was brought to market either by farmers market or roadside stand (Sneed & Fairhurst, 2018). Despite these different definitions, research has shown that consumers have consistent expectations of local food, such as freshness, healthfulness, safety, high quality, and economic benefits to their community (Onozaka, Nurse, and McFadden, 2010). All definitions take into consideration the 3 P's for sustainability-Planet, People and Profit and these three components can be analyzed further to determine the economic, environmental, health and social impacts of local food sourcing.

Now that "local food" has been defined, we can use that information and turn our focus to "why" it is important and discuss the positive and negative effects local food sourcing has. Local food research has been generally focused on strengthening the alternative food system by scaling up local agriculture, rather than advancing strategies to bridge gaps between local farmers and conventional food retail businesses (Nelligan, Cameron, Mackinnon & Vance, 2016). There have also been emerging sustainable strategies for promoting local food

systems and they are in continuous development (Aguilar, Ruiz, Rubio Rois, Chavez-Gonzalez, Sepulveda, Rodriguez-Jasso, Loredo-Trevino, Flores-Gallegos, Govea-Salas & Ascacio-Valdes, 2019). Some of the strategies include sustainability frameworks, partnerships, networking, and the forming of community food councils. These community-based coalitions are crucial to creating a just food system that promotes awareness, access, and accountability. These strategies also help to assess the collective impacts local sourcing has on individual communities. (Brian, Curtis & Hall, 2015).

Literature Review

The purpose of this review is to follow the research from various academic journals to support and access the impacts that local food sourcing has on communities. Past research highlights the importance of collaboration as a critical element in the economic development of regional tourism (Alonso & Liu, 2011). Alonso & Liu look at the role visitor centers play in the promotion of local agriculture and in raising awareness of existing tourism-related activities. Their study examines the extent to which visitor centers in an emerging tourist destination with a farming background such as the Blackwood River Valley in Western Australia, use these tools to develop their local tourism (Alonso & Liu, 2011). Despite being a rural region with a tradition in horticultural farming, raising cattle, fishing, and more recently being home to a burgeoning wine sector, respondents recognize that not enough emphasis is placed on promoting food, wine, and farm-related tourism themes (Alonso & Liu, 2011). The argument was made that the traditional farming sectors and supporting local food themes could also play a key role in raising the profile of the tourism in this area and draw quality visitors (Alonso & Liu, 2011) Nelligan, Cameron, Mackinnon and Vance also found that supporting the local food retailers and farms were significant to the regional food system in the Algoma District in Central Canada (Nelligan,

Cameron, Mackinnon & Vance, 2016). A value chain framework revealed a high degrees of interconnected factors such as the importance of fresh food, consistent supply throughout the year and decreasing overall costs of bringing products to market (Nelligan, et al, 2016). Similar exploration on the subject has been conducting by Hiroki, Garnevska, & McLaren in New Zealand where the literature also suggested that environmental sustainability is one of the goals for many of the local food movements (Hiroki, Garnevska & McLaren, 2016). The Journal of Environmental Studies and Sciences and MacFall, Lelekacs, LeVasseur, Moore and Walker also published findings in 2015 showing how food security through local food suppliers causes a shift in the food network through agricultural diversification (2015). Iceland has also seen improved food securities and a wide range of benefits through greenhouse growing (Butrico & Kaplan, 2018). Iceland's geothermal energy reserves allow for the opportunity to extend their short growing season (Butrico & Kaplan, 2018). This promotes sustainability, increases food driven economies, and benefits cooperative-driven business models for consumers (Butrico & Kaplan, 2018).

Methodology

This article will show statistics, observations and trends that determine the impacts of local food systems. The benefits of greenhouse agriculture derive from its ability to grow food that would not be possible otherwise. Yet, these require specific resources to operate effectively. Fortunately, most of these resources are renewable and greenhouses can be quite efficient in how resources are used, particularly within the Icelandic context with abundant hydropower and water. Iceland saw a 37% decrease in environmental pollution using greenhouses and copious amounts of glacial water (Butrico & Kaplan, 2018). Fehrenbach & Wharton presented quantitative and qualitative results that showed consumers and producers were most interested in

sharing information regarding the use of pesticides, freshness, food safety, animal welfare, nutrition and environmental impacts (Fehrenbach & Kaplan, 2018). They conducted surveys from three different geographic regions-Phoenix, Tucson & Prescott, AZ and distributed them to consumers and producers who frequent farmers markets (Fehrenbach et al, 2018). The survey began informed consent page, followed by measures of preferred information content, preferred communication methods, and demographic questions (Fehrenbach et al, 2018). The findings of the mixed method study sheds light on the type of information consumers and producers would like to share at farmers markets, as well as the preferred methods by which they would like it communicated (Fehrenbach et al, 2018). Farmers markets are an important aspect of both rural and urban communities, allowing consumers access to fresh, local foods and allowing small scale producers direct access to consumers which increases local economies (Fehrenbach et al, 2018). The market setting itself and the interaction between consumers and producers, through which consumers can learn more information about the foods they wish to purchase and producers can share specific food qualities with customers create a cooperative framework that forms lasting relationships in the community (Fehrenbach et al, 2018). Survey findings in Wisconsin show that 14% of consumers would frequent farmers markets more if vendors accepted food stamps and other government assistance payment options (Wilson, Witzling, Shaw and Morales, 2018). These findings may be used to improve communication between consumers and producers, thereby increasing transparency and sales at farmers markets (Fehrenbach et al, 2018). The USDA Farmers Market Directory reported a 300% increase in direct-to-consumer food purchases between 1992 -2015 and 23% was from farmers markets revenue (Wilson et al, 2018). Future studies, particularly those employing experimental designs, could implement new methods for payment and examine potential outcomes such as changes in farmers market

attendance and booth sales (Fehrenbach et al, 2018). Similar methods of surveying and observations were conducted on Australia Sunshine Coast analyzes the challenges and opportunities of reconfiguring food production systems to achieve the type of co-op preferred by the community and primary producers (Stockwell, Bradley, Davis & Smith, 2013). Situational analysis, case studies, interviews, and surveys of traditional mid-scale farmers with more recent micro- to small primary producers and food artisans provide insight into the challenges faced at a grassroots level (Stockwell et al, 2013). The findings indicate marketing management, different payment options and psychographics as the top three factors that limit the success of local food systems. (Stockwell et al, 2013). Also, the role of government plays in simplifying a supportive policy through planning, connecting and building the capacity for key players is critical (Stockwell et al, 2013). The research argues that the government is essential to the successful planning and management of peri-urban areas because of the fragmented and/or contested quality of this unique food landscape (Stockwell et al, 2013). Without further investment in place-based collaborative research, planning, capacity building, and economic development, the local food movement in these peri-urban areas is likely to continue to occupy only a narrow "alternative" cultural and economic space (Stockwell et al, 2013).

Conclusion

This research hopes to provide practitioners, community members, and interested consumers with the knowledge to make informed decisions about the importance of local food systems. While there are still some gaps in the research due to inconsistencies in the definition of “local” food, new research is published every day that adds to our knowledge about the outcomes and impacts of local food system development. The most important thing the research showed is that local food projects, programs, and systems can be designed and managed to achieve the benefits

that community members expect. It is important to first determine people's expectations for local food systems in their area, prioritize these issues as local food projects are designed, and be transparent about the qualities and characteristics of local food that the community values. In this way, you are more likely to create successful local food systems that meet a community's goals like boosting economy, decreasing environmental issues such as lowering carbon emissions with less food miles traveled, using less chemicals and pesticides as health and wellness are highlighted and creating social community ties that are the foundation for sustained local food systems.

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